

Patent Office, together with copies of the references cited therein, which are listed on the attached Form PTO-1449.

Favorable action is solicited.

Respectfully submitted,

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AMENDMENT TO THE SPECIFICATION

The following paragraph was inserted on page 1, between lines 2 and 3:

--This application is a 371 of PCT/FR00/02173, filed July 28, 2000.--

The paragraph on page 4 at line 26 to line 27 was amended as follows:

“The following may be mentioned as examples of growth **[factor] factors** which can be used to mobilize the mononuclear cells:”

The paragraph on page 5 at line 19 to line 21 was amended as follows:

“According to another feature, the invention relates to dendritic cells that are $\alpha v\beta_3^-$ $\alpha v\beta_3$, $\alpha v\beta_3^+$, CCR5 $^-$ and CCR7 $^+$, i.e. are devoid of $\alpha v\beta_3^-$ and CCR5 receptors and carry $\alpha v\beta_3$, and CCR7 receptors.”

The paragraph on page 7 at line 22 to line 27 was amended as follows:

“However, it was shown that the maturation of DC induced by TNF- α caused the induction of IL-12 production and a dramatic inhibition of IL-10 synthesis after activation by CD40. Thus mature DC according to the invention are capable of triggering the differentiation of naive T lymphocytes into type 1 T lymphocytes. Furthermore, the addition of PGE2 inhibited IL-10 production, but also IL-12 production by mature DC obtained.”

The paragraph on page 12 at line 23 to line 26 was amended as follows:

“The results obtained are reported in Figure 2. These results show that, after 6 h of culture with $[4 \mu\text{m/ml}] \mu\text{g/ml}$ of CHX, 60% of the XG-1 myeloma cells exhibited characteristics of early apoptotic cell death, i.e. binding of Annexin-V but non-incorporation of PI..”

The paragraph on page 12 at line 29 to line 34 was amended as follows:

“The phagocytosis of [apoptic] apoptotic cells represents another mode of entry for antigens and plays a major role in the phenomenon of cross priming. Recently, several phagocytic receptors have been identified on DC obtained in the presence of human sera, and it has been shown that a monocyte conditioned medium (MCM), which leads to irreversible DC maturation, downregulates their expression (6).”

The paragraph beginning page 13, line 34 and ending on page 14, line 1 was amended as follows:

“The operation was repeated with six different donors and the mean fluorescence intensity (MFI) was measured. The results obtained are shown in **Table [4] IV**.”

The paragraph at page 15 line 14 to line 27 was amended as follows:

“The immature DC obtained with GM-CSF/IL-4 did not produce p70 IL-12, but did produce very large amounts of IL-10 after triggering by CD40 [**Table 5**] [**Table V**]. The addition of IFN- γ together with stimulation by CD40 caused a 30-fold decrease in the production of IL-10 by immature DC activated by CD40. Induction of the maturation of DC with TNF- α caused a dramatic decrease in the production of IL-10 induced by CD40 (10-fold mean reduction), in association with induction of the expression of IL-12. The addition of IFN- γ again inhibited the production of IL-10 by mature DC. This is consistent with previous reports showing that IFN- γ could be a co-factor for the production of IL-12 induced by CD40 (29,30). However, for the test sample from the other three patients, IFN- γ reduced the production of IL-12 by DC obtained in the presence of GM-CSF/IL-4 and TNF- α . Finally, induction of a totally mature DC with TNF- α and PGE2 caused a reduced production

of IL-10 and IL-12 after stimulation by CD40, compared with TNF- α alone.”

The paragraph beginning page 15, line 30 and ending on page 16, line 4 was amended as follows:

“Non-activated T lymphocytes (HLA DR $^-$) were purified from healthy volunteers’ peripheral blood by two negative selection cycles using microbeads coated with CD14 and CD19 (Dynal, Oslo, Norway), followed by a cocktail of CD16, CD65 and HLA-DR mAbs (Immunotech) and anti-mouse Ig goat microbeads (Dynal). The purity of the CD3 $^+$ T cells was greater than 97%. Increasing numbers of DC treated with mitomycin (50 μ g/ml) were added to 1.5×10^5 allogenic T cells in 200 μ l of RPMI, 5% ABS. After 5 days of culture, the T cell proliferation was measured by the incorporation of tritiated thymidine (1 μ Ci/well) over the last 12 hours. The results were expressed as the mean [costs] counts per minute (cpm) \pm standard deviation, determined in sextuplet culture wells.”

The Table on page 24 was amended as follows:

Table III
Profile of DC receptors

Culture conditions	Mean % of positive cells (MFI)			
	MR	CD36	$[\alpha\text{v}\beta 3]$	$[\alpha\text{v}\beta 5]$
XV-HA GM/IL-4	98 (233)	88 (89)	0	87 (43)
XV-HA GM/IL-4/TNF	80 (95)*	37 (47)**	0	68 (32)*
XV-HA GM/IL-4/TNF/PGE2	74 (91)*	25 (33)**	0	58 (36)*

XV-HA = X-VIVO 15 medium, 2% HA

* p < 0.01 by comparison with cells cultivated with GM/IL-4

** p < 0.05 by comparison with cells cultivated with GM/IL-4

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AMENDED CLAIMS

All pending claims were canceled.

Claims 14-24 were added.

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